IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A dynamic memory buffer ~~(30, 210)~~ for buffering between one or more software applications ~~(40)~~ executing on computing means and one or more data generating and/or receiving devices ~~(20)~~ in communication through the buffer ~~(30, 210)~~ to the one or more applications ~~(40)~~, the buffer ~~(30, 210)~~ including buffer managing means ~~(210)~~ for controlling allocation of one or more portions of the buffer ~~(30)~~ to the one or more applications ~~(40)~~ so as to reduce power dissipation occurring within the one or more devices ~~(20)~~, wherein the managing means are implemented as a neural network operable to iteratively reduce power dissipation arising within the one or more devices by deriving a measure of power dissipated in the one or more devices and using said measure to control allocation of the one or more portions of the buffer.

2.(Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 1, wherein the managing means ~~(210)~~ are operable to control allocation of said one or more portions of the buffer ~~(30)~~ in response to data streaming rate demands placed upon the buffer ~~(30)~~ by said one or more applications ~~(40)~~.

3.(Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 1, wherein the managing means ~~(210)~~ are operable to control allocation of said one or more portions of the buffer ~~(30)~~ in response to approaching a maximum permissible power dissipation limit for the one or more devices ~~(20)~~.

4.(Currently Amended) ~~A~~ buffer ~~(30, 210) according to claim 1~~ for buffering between one or more software applications executing on computing means and one or more data generating and/or receiving devices in communication through the buffer to the one or more applications, the buffer including buffer managing means for controlling allocation of one or more portions of the buffer to the one or more applications so as to reduce power dissipation

occurring within the one or more devices, wherein the managing means ~~(210)~~ are operable to control allocation of said one or more portions of the buffer ~~(30)~~ in response to multiple fractional power dissipation in the one or more devices ~~(20)~~, said fractional power dissipation being proportional to corresponding potential asymptotic power dissipation arising for one or more of the applications ~~(40)~~ associated with substantially unlimited buffer ~~(30)~~ memory capacity.

5. (Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 4, wherein the multiple fractional power dissipation is within a range of 105% to 300% of corresponding potential asymptotic power dissipation.

6. (Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 5, wherein the multiple fractional power dissipation is substantially 110% of corresponding potential asymptotic power dissipation.

Claim 7 (Canceled)

8. (Currently Amended) The buffer ~~(30, 210)~~ according to claim 1, wherein the computing means, the buffer ~~(30)~~ and the one or more devices ~~(20)~~ when operating in conjunction with the one or more software applications ~~(40)~~ executing on the computing means correspond to a multi-application resource-limited system.

9. (Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 1, wherein the managing means ~~(210)~~ are implemented in software executable on at least one of the computing means and said one or more devices ~~(20)~~.

10. (Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 9, wherein predetermined data arrays are included in the managing means ~~(210)~~ for use in allocating one or more portions of the buffer ~~(30)~~ to said one or more applications ~~(40)~~ in response to data rate demanded from the one or more applications ~~(40)~~ and/or predetermined power dissipation limits for the one or more devices ~~(20)~~.

11. (Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 1, wherein at least part of the buffer ~~(30)~~ comprises an electronic shock protection (ESP) buffer.

12. (Currently Amended) ~~A~~ The buffer ~~(30, 210)~~ according to claim 1, wherein at least one of the devices ~~(20)~~ is arranged to operate in a stop-start switched duty cycle mode when streaming data.

13. (Currently Amended) A method of controlling a dynamic memory buffer ~~(30, 210)~~ for buffering between one or more software applications ~~(40)~~ executing on computing means and one or more data generating and/or receiving devices ~~(20)~~ in communication through the buffer ~~(30, 210)~~ to the one or more applications ~~(40)~~, the method including the step of arranging for the buffer ~~(30, 210)~~ to include buffer managing means ~~(210)~~ for controlling allocation of one or more portions of the buffer ~~(30)~~ to the one or more applications ~~(40)~~ so as to reduce power dissipation occurring within the one or more devices ~~(20)~~, wherein the managing means are implemented as a neural network operable to iteratively reduce

power dissipation arising within the one or more devices by deriving a measure of power dissipated in the one or more devices and using said measure to control allocation of the one or more portions of the buffer.

14. (Currently Amended) ~~A~~ The method according to claim 13, wherein the managing means ~~(210)~~ are operable to control allocation of said one or more portions of the buffer ~~(30)~~ in response to data streaming rate demands placed upon the buffer ~~(30)~~ by said one or more applications ~~(40)~~.

15. (Currently Amended) ~~A~~ The method according to claim 13, wherein the managing means ~~(210)~~ are operable to control allocation of said one or more portions of the buffer ~~(30)~~ in response to approaching a maximum permissible power dissipation limit for the one or more devices ~~(20)~~.

16. (Currently Amended) A method ~~according to claim 13~~ of controlling a dynamic memory buffer for buffering between one or more software applications executing on computing means and one or

more data generating and/or receiving devices in communication through the buffer to the one or more applications, the method including the step of arranging for the buffer to include buffer managing means for controlling allocation of one or more portions of the buffer to the one or more applications so as to reduce power dissipation occurring within the one or more devices, wherein the managing means ~~(210)~~ are operable to control allocation of said one or more portions of the buffer ~~(30)~~ in response to multiple fractional power dissipation in the one or more devices ~~(20)~~, said multiple fractional power dissipation being proportional to corresponding potential asymptotic power dissipation arising for one or more of the applications ~~(40)~~ arising for substantially unlimited buffer ~~(30)~~ memory capacity.

17. (Currently Amended) ~~A~~ The method according to claim 16, wherein the multiple fractional power dissipation is within a range of 105% to 300% of corresponding potential asymptotic power dissipation.

18. (Currently Amended) ~~A~~ The method according to claim 17,

wherein the multiple fractional power dissipation is substantially 110% of corresponding potential asymptotic power dissipation.

Claim 19 (Canceled)

20. (Currently Amended) ~~A~~ The method according to claim 13, wherein the computing means, the buffer ~~(30)~~ and the one or more devices ~~(20)~~ when operating in conjunction with the one or more software applications ~~(40)~~ executing on the computing means correspond to a multi-application resource-limited system.

21. (Currently Amended) ~~A~~ The method according to claim 13, wherein the managing means ~~(210)~~ are implemented in software executable on at least one of the computing means and said one or more devices ~~(30)~~.

22. (Currently Amended) ~~A~~ The method according to claim 21, wherein predetermined data arrays are included in the managing means ~~(210)~~ for use in allocating one or more portions of the buffer ~~(30)~~ to said one or more applications ~~(40)~~ in response to

data rate demanded from the one or more applications ~~(40)~~ and/or predetermined power dissipation limits for the one or more devices ~~(20)~~.

23. (Currently Amended) ~~A~~ The method according to claim 13, wherein at least part of the buffer ~~(30)~~ comprises an electronic shock protection (ESP) buffer.

24. (Currently Amended) ~~A~~ The method according to claim 13, wherein at least one of the devices ~~(20)~~ is arranged to operate in a stop-start switched duty cycle mode when streaming data.